Title: My Scientific Life Theory and the Alien

Author: Golden (Chin-Yuan Hwaung)

Introduction

This paper is part of my broader Scientific Life Theory, which explores the origin, mechanism, and nature of life from a scientific and logical standpoint. In this section, I will apply my life theory to the question of alien life and the possibility of extraterrestrial visits to Earth. While the universe contains billions of stars and likely supports life on many planets, I will show why no alien life has visited Earth and why attempting to search for or contact extraterrestrial civilizations is not practical.

Life in the Universe

The universe is vast and filled with stars—many of which have planets within habitable zones. It is reasonable to assume that life may form on some of these planets if their environments support it. All life on Earth is made of carbon-based molecules and uses DNA (or RNA) to store and transmit genetic information. DNA is built from five core elements: carbon, hydrogen, oxygen, nitrogen, and phosphorus (CHONP). These elements are common in the universe.

Earth contains all stable elements. If life could use a fundamentally different biochemical system (i.e., not based on DNA/RNA or CHONP), we would expect to find such organisms here. But we have not. Therefore, it is logical to assume that life everywhere—including intelligent life—uses similar biochemistry.

The Nature of Intelligent Life

On Earth, humans dominate due to intelligence. Intelligence enables tool-making, technology, and societal structures. If intelligent life evolves elsewhere, it may follow a similar path, potentially developing advanced technology and space travel. These beings are what we refer to as “aliens.”

However, intelligent life is still biological. Like humans, they would age, have finite lifespans, and require resources such as food, water, and environmental control. These limitations remain true even with more advanced technology.

Interstellar Travel and the Limits of Physics

The nearest star system, Alpha Centauri, is 4.2465 light-years away. Even if an alien civilization developed space boats capable of traveling at 12,000,000 meters per

second (12 x 10^6 m/s), which is about 4% the speed of light, the trip to Earth would take over 106 years one way and 212 years round trip.

Such a journey faces immense challenges: - **Massive fuel requirements:** Due to the **conservation of momentum**, a space boat must eject mass (fuel or propellant) in the opposite direction to accelerate, decelerate, or change course. - **Rocket equation limitations:** The faster the speed, the more mass must be expelled. To reach 12 x 10^6 m/s using a photon engine (with exhaust speed of 3 x 10^7 m/s), the remaining mass after acceleration is only ~67%. To decelerate, another 34% is lost. For a full round trip, over 80% of the original mass is consumed just for propulsion. - **Biological endurance:** The alien crew must survive over 200 years, including spare parts for life support, food storage, radiation protection, and machine maintenance.

In short, interstellar travel is nearly impossible with any known or imaginable propulsion system due to conservation of momentum and energy constraints.

The Misunderstood Principle: Conservation of Momentum

Many people underestimate or misunderstand the principle of **conservation of momentum**. In space, every action (acceleration or deceleration) requires ejecting mass in the opposite direction. There is no atmosphere to push against; motion is only achieved by changing momentum.

This is why: - Rockets lose mass rapidly. - Travel efficiency drops sharply as speed increases. - Directional changes in space also require expelling fuel.

The implication: traveling far distances in space is extremely mass- and energy-intensive. The idea that alien ships could easily travel light-years to reach Earth violates this fundamental law.

Conclusion: No Aliens Have Visited Earth

From a life theory perspective, aliens—if they exist—are similar to us in biology and intelligence. They age, consume resources, and depend on technology. From a physics perspective, the constraints of conservation of momentum, energy loss, travel time, and life support requirements make it extremely unlikely for any alien civilization to travel to Earth.

Therefore, I conclude: - **UFOs are not alien spacecraft.** - **No extraterrestrial life has visited Earth.** - **We should not spend major time or effort trying to visit or contact aliens.**

Instead, we should focus on understanding and protecting the only life we know—the life on Earth.